

CLAIMS

What is claimed is:

1 1. A fusing system for fusing toner to a recording medium, comprising:
2 a fuser roller;
3 a pressure roller in contact with the fuser roller; and
4 a heating roller external to and in contact with one of the fuser and the pressure
5 rollers.

1 2. The system of claim 1, wherein the fuser roller comprises a hollow tube
2 and an internal heating element.

1 3. The system of claim 1, wherein the pressure roller comprises a hollow tube
2 and an internal heating element.

1 4. The system of claim 1, wherein the fuser roller comprises an outer layer
2 composed of an elastomeric material.

1 5. The system of claim 1, wherein the pressure roller comprises an outer
2 layer composed of an elastomeric material.

1 6. The system of claim 1, wherein the heating roller contacts the fuser roller.

1 7. The system of claim 1, wherein the heating roller comprises a hollow tube
2 and an internal heating element.

1 8. The system of claim 7, wherein the internal heating element comprises a
2 tungsten filament halogen lamp.

1 9. The system of claim 1, further comprising a second heating roller external
2 to and in contact with the pressure roller.

1 10. A fusing system for fusing toner to a recording medium, comprising:
2 a hollow fuser roller having an internal heating element and an outer layer
3 composed of an elastomeric material;
4 a pressure roller in contact with the fuser roller and having an outer layer
5 composed of an elastomeric material; and
6 a hollow heating roller having an internal heating element, the heating roller
7 external to and being in contact with the fuser roller.

1 11. The system of claim 11, wherein the pressure roller comprises a hollow
2 tube and an internal heating element.

1 12. The system of claim 11, wherein the internal heating elements comprise
2 tungsten filament halogen lamps.

1 13. The system of claim 11, further comprising a second heating roller
2 external to and being in contact with the pressure roller.

1 14. A fusing system for fusing toner to a recording medium, comprising:
2 a fuser roller having an outer surface;
3 a pressure roller in contact with the fuser roller; and
4 external heating means positioned outside of the fuser roller that is adapted to heat
5 the outer surface of the fuser roller.

1 15. The system of claim 15, wherein the external heating means comprise an
2 external heating roller in contact with the fuser roller.

1 16. A device in which toner is fused to a recording medium, comprising:
2 means for attracting toner to a surface of the recording medium; and
3 a fusing system including a hollow fuser roller having an internal heating element
4 and an outer layer composed of an elastomeric material, a pressure roller in contact with
5 the fuser roller and having an outer layer composed of an elastomeric material, and a
6 hollow heating roller having an internal heating element, the heating roller being in
7 contact with the fuser roller.

1 17. The device of claim 17, wherein the pressure roller comprises a hollow
2 tube and an internal heating element.

1 18. The device of claim 17, wherein the internal heating elements comprise
2 tungsten filament halogen lamps.

1 19. The system of claim 17, further comprising a second heating roller
2 external to and being in contact with the pressure roller.

1 20. A method for heating a fuser roller of a fusing system, comprising the
2 steps of:
3 providing an external heating roller;
4 contacting an outer surface of the fuser roller with the external heating roller;
5 heating the external heating roller; and
6 rotating the external heating roller and the fuser roller such that heat is transferred
7 from the external heating roller to the fuser roller.